

**Maryland Energy Administration
EmPOWERing Clean Energy Communities
Fiscal Year 2014 Low-to-Moderate Income Grant Program
Instruction Document**

Overview

In Fiscal Year 2014, the Maryland Energy Administration (MEA) has \$3.5 million in EmPOWERing Clean Energy Communities grant funds available through the Strategic Energy Investment Fund (SEIF) for entities that serve Maryland's low-to-moderate income households.

The EmPOWER Clean Energy Communities grants will be competitively awarded to energy efficiency projects that generate significant energy savings, with the financial benefits of the energy savings being passed on to Maryland's low-to-moderate income residents. Projects that maximize energy savings and the number of low-to-moderate income residents served will receive grant funding priority.

In order to ensure an equitable distribution of grant funds, each Maryland county (or county equivalent) was appropriated an allocation of EmPOWER Clean Energy Communities grant funds based on the number of low-to-moderate income households residing in the respective county (or county equivalent). Grant funds will be awarded competitively within the applicant pool for each respective county.

The chart below shows each county's allocation of EmPOWER Clean Energy Communities low-to-moderate income grant funds.

<u>County</u>	<u>Allocation</u>	<u>County</u>	<u>Allocation</u>
Allegany	\$100,000	Harford	\$100,000
Anne Arundel	\$161,500	Howard	\$100,000
Baltimore City	\$342,500	Kent	\$100,000
Baltimore County	\$340,000	Montgomery	\$345,000
Calvert	\$100,000	Prince George's	\$379,000
Caroline	\$100,000	Queen Anne's	\$100,000
Carroll	\$100,000	St. Mary's	\$100,000
Cecil	\$100,000	Somerset	\$100,000
Charles	\$100,000	Talbot	\$100,000
Dorchester	\$100,000	Washington	\$100,000
Frederick	\$100,000	Wicomico	\$100,000
Garrett	\$100,000	Worcester	\$100,000

If MEA does not receive sufficient grant applications in a particular county, MEA may elect to reallocate grant funding to maximize the achievement of the EmPOWERing Clean Energy Communities program goals.

Similarly, if additional sources of grant funding become available during the fiscal year, MEA will also elect to allocate the additional grant funding in a manner that will best achieve the goals of the EmPOWERing Clean Energy Communities program.

General Information

The 2014 EmPOWERing Clean Energy Communities low-to-moderate income grant program is being operated on a county-by-county basis. If an applicant wishes to apply for grants in multiple counties, a SEPARATE grant application must be submitted for each county.

There is no upper or lower limit on the amount of funds for which an applicant may apply except for the county-by-county allocations described in this document.

Funding from Other Sources

Grants may be made in conjunction with, or in addition to, financial assistance provided through other State, federal, or private programs. In all cases, MEA grant funds must supplement, and not supplant, other funding sources. While matching funds are not required, Grantees are encouraged to make a contribution in order to maximize the amount of energy savings achieved through the project. Matching funds can include:

- 1) Cash
- 2) In-kind services
- 3) Equipment, labor, or materials
- 4) EmPOWER Maryland energy efficiency utility incentives

EmPOWER Maryland incentives

As part of the EmPOWER Maryland legislation passed in 2008, Maryland's five largest electric utilities offer incentives for a selection of energy efficiency measures. MEA encourages grant applicants to pursue the EmPOWER Maryland energy efficiency programs being offered by the electric utility in their service territory, if applicable, as these incentives should enable grantees to expand the size of their respective energy projects, installing more energy efficiency measures and/or serving more low-to-moderate income households. Each electric utility offers slightly different energy efficiency programs. The specific energy efficiency measures being offered are outlined on their individual websites:

Potomac Edison: https://www.firstenergycorp.com/save_energy/save_energy_maryland.html

BGE: www.bgesmartenergy.com

Delmarva Power: <http://www.delmarva.com/energy/conservation/mdinformation/>

Pepco: <http://www.pepco.com/energy/conservation/meiin/>

SMECO: <http://www.smeco.coop/save/>

Should a grantee decide to take advantage of an EmPOWER Maryland energy efficiency program being offered by an electric utility, please note that MEA will only reimburse for the cost of the energy efficiency measures minus the efficiency rebate. In addition, grantees will need to share incentive information with MEA as part of the grant reporting process. This will enable MEA to ensure that energy savings estimates are not being double-counted towards the energy reduction goals established by the EmPOWER Maryland legislation.

All grant funding leveraged from sources other than MEA, including incentives obtained through participating electric utility rebate programs, should be summarized in *Section 24: Total Funding Match/Leveraged Funds* of the grant application.

Grant Project Period

MEA anticipates that most grant agreements will be available for signature by **the end of February 2014**. For planning purposes, MEA requests that all construction activities be designed to be completed by **September 30, 2014** with all invoices and project reports submitted to MEA by no later than **October 31, 2014**.

Eligible Applicants

The following organization types are eligible to receive funding through the 2013 EmPOWERing Clean Energy Communities low-to-moderate income grant program:

- Local governments (counties and/or municipalities)
- Incorporated non-profit organizations

Non-profit organizations should include a description of their organization in the grant application. Additionally, proof of incorporation should also be included as an attachment to the grant application.

Grant Income Requirements

Grant funds must be used to fund energy efficiency projects that benefit Maryland's low-to-moderate income population. For the purposes of this application, low and moderate income households are defined as households with total household incomes that are less than 60% and 85%, respectively, of the median income for each Maryland County. Income limits can be found on the Maryland Department of Housing and Community Development (DHCD) website at http://dhcd.maryland.gov/website/programs/prhp/Documents/2013_MD_Income_Limits.pdf. 60% income limits can be found on pages 9 and 10, 85% income limits can be found on pages 17 and 18.

Examples:

	<u>60% AMI</u>	<u>85% AMI</u>
4 person household in Allegany County	\$45,720	\$64,750
2 person household in Anne Arundel County*	\$41,100	\$58,200

* Anne Arundel County is located in the Baltimore PMSA.

Grant applicants do not have to receive the energy benefits directly (for instance, a non-profit organization could apply for a grant to make energy efficiency improvements in a senior living facility where residents are responsible for paying utility bills).

As part of the grant requirements, Grantees will be responsible for verifying that program participants are in compliance with the established income limits. *Section 37: Eligibility Verification* of the grant application requires grant applicants to describe the process that will be used to verify that all participants and/or beneficiaries comply with the low-to-moderate income requirements.

Allowable Grant Measures

The majority of Grant funds should be used directly on energy efficiency measures, including the purchase and installation of machinery and/or equipment. A limited amount of Grant funding may be used for the costs of technical assessments, licenses, engineering, and/or training, after first being approved by MEA.

Grant Restrictions & Limitations

- The State of Maryland has adopted the 2012 International Energy Efficiency Code (IECC). All projects funded through the EmPOWERing Clean Energy Communities grant program should comply with the 2012 IECC code.
- In general, MEA will not provide more than \$5,000 in grant funds per home energy retrofit. For home energy retrofits necessitating an HVAC upgrade, MEA will not provide more than \$8,000 in funds per home energy retrofit.
- For appliance replacements, all appliances funded under this grant must be ENERGY STAR qualified. MEA will not fund the replacement of any appliances that are not available in an ENERGY STAR version.
 - For any refrigerator replaced using EmPOWERing Clean Energy Communities grant funding, the maximum reimbursable cost per ENERGY STAR refrigerator is \$800.
 - For water heaters, ENERGY STAR no longer qualifies electric tank water heaters and electric instantaneous water heaters. For this reason, MEA will no longer fund electric tank water heater or electric instantaneous water heater replacements. ENERGY STAR qualified heat pump water heaters and natural gas water heater replacements are still eligible for grant funding.
- For new home construction projects, MEA will only fund the incremental purchase cost of upgrading to a higher level of energy efficiency (i.e. MEA will pay the purchase cost of upgrading from a baseline efficiency heat pump (SEER 13) to a higher efficiency heat pump (SEER 14.5+)). MEA will not pay for the cost of installing energy efficiency measures in new construction projects unless the grantee can explain why the cost of installing the energy efficiency measure is more expensive than the costs of installing a baseline efficiency measure. If you are proposing a new construction project, please provide MEA with cost estimates for both the energy efficient technology and the baseline efficiency technology in your grant application.
- To comply with the Strategic Energy Investment Fund statute, low income residents cannot be charged for participation in programs that receive EmPOWERing Clean Energy Communities low-to-moderate income grant awards.
- Renewable energy technologies are not eligible for the EmPOWERing Clean Energy Communities grant program. Information on MEA programs that provide renewable energy incentives can be found at <http://www.energy.state.md.us/Business/cleanenergygrants/index.html> and <http://www.energy.state.md.us/Residential/cleanenergygrants/index.html>.

- In general, MEA does not normally approve projects that involve fuel switching.
- MEA encourages all applicants to focus on residential households that are ineligible for assistance through the Weatherization Assistance Program (WAP) or the EmPOWER Maryland Low Income Energy Efficiency Program (LIEEP) run by the Department of Housing and Community Development (DHCD).

Administrative Costs

Administrative costs are capped at a maximum of 10% of the Grant award. MEA defines administrative costs to be non-energy related costs (e.g. rent, utilities, etc.)

If you are planning on requesting administrative costs, please be sure to clearly identify the amount of administrative funds being requested in *Section 30: Cost Breakdown* of the EmPOWERing Clean Energy Communities grant application. In *Section 31: Administrative Costs* of the application, Grant applicants should explain how administrative costs will be used in association with their proposed Grant project.

Health and Safety Repairs

For projects involving whole home energy retrofits (such as Home Performance with ENERGY STAR projects), non-energy related health and safety repairs that enable energy efficiency upgrades are capped at \$1000 per home. The cost of the health and safety repairs must be included in the \$5,000 per house maximum budget (or \$8,000 per home maximum budget for any home receiving an HVAC upgrade).

Grant Evaluation Criteria

On a county-by-county basis, proposals will be evaluated using three primary criteria:

- **Annual Energy Savings per dollar of MEA investment-** MEA is looking for projects that maximize potential energy savings. If an applicant can access matching funds, the ratio of energy savings to dollar of MEA investment will improve.
- **Impact on Maryland's low-to-moderate income residents-** MEA is looking for projects that maximize the number of low-to-moderate income residents that can be served with EmPOWERing Clean Energy Communities grant funding. MEA will be evaluating this metric based on the number of low-to-moderate income individuals/households that will benefit from grant funds over a 15 year period, the standard life of many energy measures.

Formula: (# of households) * [(# if individuals/household)/(duration in home)] * 15 years

For example:

- An upgrade to a homeless shelter that is able to house 5 individuals with most people staying approximately one year will serve an estimated 75 individuals over the life of the project.

1 household * [(5 individuals/household)/(1 year)] * 15 years =

75 individuals will benefit over the 15 year period

- An upgrade to a residential, privately owned home that contains a family of four will benefit four individuals (or 1 household) over the life of the project. It is assumed that the family will not relocate during this timeframe.

$$1 \text{ household} * [(4 \text{ individuals/household}) / 15 \text{ years}] * (15 \text{ years}) =$$

4 individuals will benefit over the 15 year period

- **Applicant's willingness and ability to deliver energy upgrades to households that are not eligible for assistance through other channels.** In particular, MEA is looking for applications that propose methods to target households unable to able to access the Department of Housing and Community Development's Weatherization Assistance Program (WAP) and EmPOWER Maryland Low Income Energy Efficiency Program (LIEPP) programs.

In addition to the primary criteria shown above, MEA will also be considering the following secondary criteria:

- The ability of project construction to be completed by September 30, 2014 with all invoices submitted to MEA by no later than October 31, 2014.
- Applicant's past performance (if applicable) complying with program requirements.
- Location, as related to the State of Maryland Priority Funding Areas¹. The State of Maryland gives priority to projects occurring in Priority Funding Areas. According to the Maryland Department of Planning (MDP) website (<http://www.mdp.state.md.us/OurProducts/pfamap.shtml>), Priority Funding Areas are existing communities and places where local governments want State investment to support future growth. The following areas qualify as Priority Funding Areas:
 - a. Every municipality, as they existed in 1997;
 - b. Areas inside the Washington Beltway and the Baltimore Beltway
 - c. Areas already designated as enterprise zones, neighborhood revitalization areas, heritage areas and existing industrial land.

Energy Savings Estimates

In order for a grant to be evaluated favorably, each application must include detailed energy savings estimates. To simplify energy savings calculations for program applicants during fiscal year 2014, MEA has developed some simple energy assumptions for residential energy projects using formulas outlined in the Mid-Atlantic Technical Reference Manual (TRM), version 2. The TRM was developed by the Northeast Energy Efficiency Partnership (NEEP) to standardize energy savings assumptions across the Mid-Atlantic region.² The residential energy assumptions are outlined on the following two pages.

For commercial energy projects and for residential energy measures not quantified in this document, grant applicants can site alternative sources of energy estimates including, but not limited to, energy audits completed by a qualified auditor, online calculators maintained by the U.S. Department of Energy (DOE), ENERGY STAR calculators, etc.

¹ A map of Priority Funding Areas, including a search by address feature, can be found on the MDP website at <http://www.mdp.state.md.us/OurWork/PFAIMap.shtml>.

² A copy of the Mid-Atlantic TRM version 2 can be downloaded from http://www.neep.org/Assets/uploads/files/emv/emv-products/A5_Mid_Atlantic_TRM_V2_FINAL.pdf. MEA used the TRM formulas to develop a preliminary estimate of potential energy savings, allowing MEA to make an "apples to apples" comparison of proposed energy measures. If you have alternative energy savings calculations, please include these energy savings estimates as well, clearly describing the source of the alternative energy savings calculations.

For all alternative energy savings estimates, please be sure to site the source of your estimate and provide all necessary back-up documentations (e.g. website URLs, formulas, etc.).

Residential Energy Assumptions (based on the Mid-Atlantic Technical Reference Manual, version 2)

Lighting & Appliance Measures

Replacement of an incandescent bulb with a CFL:	$\Delta\text{kWh/year} = 30$
Replacement of an incandescent bulb with a LED:	$\Delta\text{kWh/year} = 71$
Replacement of an existing refrigerator with an ENERGY STAR refrigerator	$\Delta\text{kWh/year} = 117$
Replacement of an existing clothes washer with an ENERGY STAR clothes washer:	
a) Using hot water produced by electricity:	$\Delta\text{kWh/year} = 153$
b) Using hot water produced by natural gas:	$\Delta\text{MMBTU/year} = 0.42$
c) Using hot water produced by oil:	$\Delta\text{MMBTU/year} = 0.05$
d) Using hot water produced by propane:	$\Delta\text{MMBTU/year} = 0.01$

HVAC Measures

Replacement of an existing air conditioning unit with an ENERGY STAR AC unit:	$\Delta\text{kWh/year} = 101$
Replacement of an air source heat pump with an ENERGY STAR heat pump:	$\Delta\text{kWh/year} = 297$
Replacement of an existing natural gas boiler with an ENERGY STAR gas boiler:	$\Delta\text{MMBTU/year} = 4.56$
Replacement of a gas furnace with an ENERGY STAR condensing gas furnace:	$\Delta\text{MMBTU/year} = 8.6$
Replacement of an existing room AC unit with an ENERGY STAR room AC unit:	$\Delta\text{kWh/year} = 121$
Installation of a programmable thermostat (fossil fuel heating savings only) ³ :	$\Delta\text{MMBTU/year} = 3.41$
Duct sealing- cooling (central AC or heat pump):	$\Delta\text{kWh/year} = 212$
Duct sealing- heating (electric heat pump):	$\Delta\text{kWh/year} = 467$
Duct sealing – heating (electric resistance heat):	$\Delta\text{kWh/year} = 934$
Duct sealing- fossil fuel heating:	$\Delta\text{MMBTU/year} = 8.2$

Air Sealing Measures:

Air sealing – air conditioning savings:	$\Delta\text{kWh/year} = 309$
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³ The TRM does not estimate energy savings associated with the use of program thermostats associated with electrical heating and/or cooling.

Air sealing- heat pump (heat only) savings:	$\Delta\text{kWh/year} = 943$
Air sealing- electric resistance heat savings:	$\Delta\text{kWh/year} = 1888$
Air sealing- fossil fuel heat savings:	$\Delta\text{MMBTU/year} = 9.76$

Attic/Roof/Ceiling Insulation Measures:

Attic/roof/ceiling insulation – air conditioning load savings:	$\Delta\text{kWh/year} = 28$
Attic/roof/ceiling insulation – electric heat pump load savings:	$\Delta\text{kWh/year} = 470$
Attic/roof/ceiling insulation – electric resistance heat load savings:	$\Delta\text{kWh/year} = 940$
Attic/roof/ceiling insulation – fossil fuel heat load savings:	$\Delta\text{MMBTU/year} = 4.86$

Water Related Measures:

Low flow showerhead:	
a) In a home with an electric domestic water heater:	$\Delta\text{kWh/year} = 168$
b) In a home with a fossil fuel domestic water heater:	$\Delta\text{MMBTU/year} = 0.75$
Faucet aerators:	
a) In a home with an electric domestic water heater:	$\Delta\text{kWh/year} = 29$
b) In a home with a fossil fuel domestic water heater:	$\Delta\text{MMBTU/yr} = 0.128$
Domestic hot water tank wrap ⁴ :	$\Delta\text{kWh/year} = 79$
Domestic hot water pipe insulation:	
a) In a home with an electric domestic water heater:	$\Delta\text{kWh/year} = 95$
b) In a home with a fossil fuel domestic water heater:	$\Delta\text{MMBTU/yr} = 0.425$
Installation of an ENERGY STAR high efficiency gas storage water heater:	$\Delta\text{MMBTU/year} = 3.0$
Installation of an ENERGY STAR gas condensing water heater:	$\Delta\text{MMBTU/year} = 5.9$
Installation of an ENERGY STAR whole home tankless water heater:	$\Delta\text{MMBTU/year} = 6.3$

Sample Energy Savings Calculation

A sample energy calculation using the provided residential energy savings assumptions is shown below. Each grant application should include a similar breakdown of estimated energy savings, by technology, in *Section 26: Annual Energy Savings*. Lengthy calculations can be included as a separate attachment referenced in the application.

⁴ In a home containing an electric hot water heater that is not already well insulated.

Example: A grant applicant proposes to complete three whole home retrofits. All three homes have electric heat pumps. Likely energy measures include air sealing and the installation of 1 low flow showerhead, 2 faucet aerators, and 5 CFLs per home.

For each electric home:

Air sealing – air conditioning savings:	$\Delta\text{kWh/year} = 309$
Air sealing- heat pump (heat only) savings:	$\Delta\text{kWh/year} = 943$
Low flow showerhead in a home with an electric water heater:	$\Delta\text{kWh/year} = 168$
Faucet aerators in a home with an electric domestic water heater:	$\Delta\text{kWh/year} = 29 * 2 \text{ per home}$
Replacement of an incandescent bulb with a CFL:	$\Delta\text{kWh/year} = 30 * 5 \text{ CFLs/home}$
<u>Total anticipated energy savings per home:</u> $(309+943+168+29*2+30*5) = 1628 \text{ kWh/year}$	
<u>Total anticipated energy savings (entire project)</u> $= 5 * 1628 \text{ kWh} = 8140 \text{ kWh/year}$	

Application Submission

Please use the grant application entitled “Maryland Energy Administration EmPOWERing Clean Energy Communities Low-to-Moderate Income Grant Program- FY 2014”. This document can be found on the Maryland Energy Administration EmPOWERing Clean Energy Communities Low-to-Moderate Income Grant Program webpage. Additional supporting documents can be attached as necessary.

Applications must be submitted to the Maryland Energy Administration by **Saturday, November 30th, 2013.**

For any project occurring in multiple counties, a separate application must be submitted for each county. Combined applications for multiple counties will not be evaluated.

Instructions for Submitting Applications:

Applications should be submitted via email to the Maryland Energy Administration at

EmPOWERMD.LMI@sra.com

All applications should meet the following criteria:

- All files should be saved in PDF or Word 1997-2003 format.
- All files sent over to MEA should be less than 10 MB in size. Files in excess of 10 MB may face difficulty getting through MEA’s email system.
- If you are going to submit your application in parts, please number all of your email submissions (Part 1 of 3, Part 2 of 3, etc.) so that we can ensure the entire application is received by MEA.
- If you are submitting grant applications for multiple counties, please be sure to include the name of the County in the email’s subject line.

No applications will be accepted after the deadline.

MEA will send an email confirming receipt of your application within 24 hours of submission. If you do not receive a confirmation email within 24 hours of submission, please contact MEA to ensure that your application was received.

Grantee Responsibilities

Grant Agreement:

Before starting work, each grantee will need to first enter into a grant agreement with MEA. Depending on available funding levels and the type of measures proposed, grant applications may not be funded exactly as written in the original grant proposal.

Grant Reporting:

Grantees are responsible for submitting the following reporting documents to the Maryland Energy Administration, as a condition of the grant award:

- 1) Grant timeline(s)
- 2) Monthly Grant Progress Reports
- 3) Monthly Energy Metrics Worksheet (when applicable)
- 4) Monthly Grant Expenditure Summary Report (when applicable)

Monthly Grant Progress Report

Once the Grant agreement has been signed, Grantees are required to submit a grant progress report each month until all grant funds have been expended. Grant progress reports are due to MEA by the end of the next month (for example, the grant report for January 2013 should be submitted to MEA by February 28th, 2013).

Monthly Energy Metrics Worksheet

For any month that a grantee completes the installation of energy measures, the grantee is required to complete the monthly energy metrics worksheet. The information submitted on this worksheet will enable MEA to estimate the energy savings associated with each project, allowing these energy savings to be counted towards the State's energy goals. MEA recommends that all potential grantees review the attached Monthly Energy Metrics Worksheet in order to fully understand the energy reporting requirements of this grant program.

Monthly Grant Expenditure Summary Report

For any month that a grantee is submitting a reimbursement request to MEA, the invoice should be accompanied by the Monthly Grant Expenditure Summary Report. This report will detail how the grant reimbursement request was calculated by the Grantee.

Grant Invoicing:

All EmPOWERing Clean Energy Communities grants will be distributed through a reimbursement process. The Grantee will need to provide an invoice, as well as invoice supporting documentation (e.g. copies of receipts and invoices), to MEA in order to receive grant funds. Invoices must be submitted to MEA on Grantee letterhead or using the MEA-generated *Grantee Invoice Template*. The invoice should also list the Grantee's federal tax identification number and MEA grant number. Once all required invoice and reporting documentation has been received and approved by MEA, Grantees can expect to receive reimbursement in approximately 30 days.

Examples of all grant reporting and invoicing forms can be found at the end of this EmPOWERing Clean Energy Communities grant instructions document.

Historical Preservation:

In order to comply with the National Historic Preservation Act of 1966, all buildings (including individual homes) being updated using an EmPOWERing Clean Energy Communities low-to-moderate income grant must first be reviewed to ensure that the proposed grant project will not have any “adverse effects” on a historic property. Grant recipients will be required to provide MEA with documentation from the Maryland Historical Trust, or other qualified historian or historic organization, showing that the proposed project will have “no adverse effect” on historic properties.

Additional information on the historical preservation review process can be found on the Maryland Historical Trust’s website at <http://mht.maryland.gov/governments.html>.

Liability Insurance:

Comprehensive third-party liability insurance is expected to be maintained for all work funded by Grant funds. MEA must be named as an additional insured. The insurance provided shall include, but not be limited to, insurance protecting MEA from bodily injury and property damage, including, but not limited to all workers’ compensation insurance, and errors and omissions. All insurance certificates must be maintained in Grantee files and be made available upon request by MEA.

Licensing:

Grantees must ensure that contractors working on projects funded under this program comply with all necessary state and local licensing requirements, including Maryland Home Improvement Commission (MHIC) licensing, as appropriate.

Procurement:

In order to ensure that Grant funds are being used properly, MEA is requesting that each potential Grantee provide a brief summary of their organization’s procurement policy and/or practices in *Section 35: Procurement Policy and/or Practices* of the grant application.

Additional Funds

Because the Strategic Energy Investment Fund (SEIF) is funded in part through the quarterly auction of carbon allowances, additional grant funding occasionally becomes available later in the fiscal year after the initial program announcement has been made. If your organization has the capability and willingness to take advantage of additional grant funding that may become available, please indicate this capability in *Section 36: Additional Funds* of the grant application. Please note that any additional funding will need to be used on projects that are consistent with your original grant application.

Grant Conditions

As a condition of the grant award, all grant recipients must agree to not discriminate in any manner against an employee or grant beneficiary because of race, color, religion, creed, age, sex, marital status, national origin, ancestry, or disability of a qualified individual with a disability.

Questions

Grant program questions should be directed to MEA Program Managers Alec Fields (afields@energy.state.md.us or 410-260-2630) or Dean Fisher (dfisher@energy.state.md.us or 410-260-2630).